

1989 MANAGEMENT PLAN
YAKUTAT AREA SET GILL NET FISHERY



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INTRODUCTION

The Yakutat Area encompasses the waters of Alaska between Cape Suckling and Cape Fairweather. The area is divided into two fishing districts; the Yakataga District between Cape Suckling and Icy Cape, and the Yakutat District between Icy Cape and Cape Fairweather. All five salmon species are harvested in the Yakutat Area, with sockeye, coho, and pink salmon comprising the majority of the catch in that order of importance.

Set gill net gear is the only net gear permitted in the Yakutat Area. Approximately 150 commercial set net entry permits are renewed annually. Set net permit holders in the Yakutat Area do not have registered sites and may fish in any open fishing area. Fishermen commonly move between fisheries during the season, however, only one river may be fished concurrently.

Most of the individual set net gill fisheries begin the season with targeted sockeye salmon fishing in mid-June. While in August, coho salmon dominate the catch. The only targeted pink salmon fishery occurs in the southeast portion of Yakutat Bay harvesting salmon returning to Humpy Creek. Set gill net fisheries in the Yakataga District harvest primarily coho salmon.

Anticipated Salmon Returns

The overall salmon production in the Yakutat Area is currently below the historical annual peak production of 800,000 fish, however, the returns are improving. In the recent ten years, the average catch is 375,000 fish. Set net gear accounted for approximately 518,000 salmon during the 1988 season which represented approximately 90% of the Yakutat commercial salmon catch; troll gear accounted for the remainder of the catch.

No formal forecast program exists for the Yakutat salmon returns. Pre-season expectations are based on parent year commercial catch, known or estimated spawning escapements, and local observations of rearing conditions. Expectations for the 1989 Yakutat Area fishing seasons are for average to above average sockeye salmon returns, average to below average coho salmon returns, and below average pink salmon returns.

Fishery Management

The primary management goal for the Yakutat set gill net fishery is to regulate fishing times and the open areas in each fishery to provide adequate spawning escapements and allow a harvest of fish surplus those escapement needs. During the 1989 season, set gill net management will be based on inseason assessments of salmon run strength. This includes both fishery performance and spawning escapement information. In many areas poor visibility, due to glacial turbidity, prevents in-season observation of salmon spawning escapements. In those glacial systems, in-season catches and pre-season run strength expectations will be relied upon for management.

Fishery Opening Dates

The 1989 opening dates for the major fisheries will be as follows:

YAKUTAT DISTRICT

Alsek River	- June 12
Yakutat Bay	- June 12 (south of 59°41' N. latitude)
Dangerous River	- June 12

Manby Shore Ocean	- June 19
Lost River	- June 19
Situk-Ahrnklin Lagoon	- June 19
East River	- June 26
Sudden and Manby Streams	- June 26
Remainder of the Yakutat District	- June 26
Italo River	- Dependent on observed run strength.

YAKATAGA DISTRICT

Seal River	- June 19
Remainder of Yakataga District	- Approximately August 21 depending on coho salmon run strength.

1989 SUMMER SEASON MANAGEMENT PLAN

This management plan concentrates on the 11 major fisheries in the Yakutat area. Information on the areas which are occasionally fished is available from sources listed in the back of this report.

Alsek River

The Alsek River fishing area is located 45 miles southeast of Yakutat. This large, glacial river extends approximately 130 miles from its mouth up-river into the Yukon Territory in Canada. The U.S./Canada border is approximately 40 miles upstream from the river mouth. The Alsek River supports major populations of chinook, sockeye, and coho salmon, and small populations of pink and chum salmon. Directed Alaskan set gill net fisheries currently focus on sockeye and coho salmon. Additionally, sport and subsistence fisheries occur in the Canadian portions of the drainage.

Historically, a chinook salmon directed set gill net fishery was conducted during May in the Alaskan waters of the Alsek River. However, due to depressed returns, the directed fishery has been closed since 1962. Chinook salmon are currently harvested incidentally during the sockeye salmon directed fishing periods in early June. Research is currently underway to better understand the dynamics of the chinook salmon return to the Alsek River. The return of chinook salmon is not expected to produce any fish surplus to spawning needs.

The Alsek River set gill net catch of sockeye salmon has averaged approximately 12,000 sockeye during the last five years, this catch is well below the long term average of approximately 25,000 fish. The Canadian subsistence and sport fisheries have accounted for an average take of approximately 3,000 sockeye in recent years. A below average return of sockeye salmon is expected for 1989.

The initial Alsek River opening will be June 12. This represents a one week delay from the regulatory scheduled normal opening date. The delayed opening is necessary to provide better escapement for the early run portion of the sockeye salmon return as well as to minimize the incidental harvest of chinook salmon.

Corresponding to this delayed opening, Canada has indicated a conservative management approach for their subsistence fishing season, by not allowing any fishing until mid-August. This delayed opening date shall limit the harvest of early run sockeye salmon.

The initial Alsek River weekly fishing period will be for 24 hours with the opening beginning at noon. The period will be closely monitored and could be extended if the return of early run sockeye is of sufficient strength and the harvest of chinook can be minimized. The duration of subsequent sockeye

salmon fishing periods will be based upon inseason evaluation of sockeye catch and effort levels. As during recent years, a historical catch and escapement model will be used as a management tool to estimate total run size. This model has proved reliable and will be an important component of the inseason management process. However, the model does require 3 weeks of fishing information before an accurate prediction of the total run size can be made. Fishermen are encouraged to discuss the model with the department staff.

The fishery is being opened on June 12 to harvest sockeye salmon. To minimize the incidental take of chinook salmon, gill nets will be restricted to a maximum mesh size of six inches through July 2. Set gill net fishermen are encouraged to minimize the incidental harvest of chinook salmon as much as possible to assist rebuilding of the depressed Alsek River chinook salmon stock.

The Alsek River surf fishing area can be expected to be open during the same time periods as the inriver fishery. The surf fishing area includes the shoreline, 3/4 of a mile in each direction, from the river mouth to the outermost bar where the surf breaks.

East River

The East is a short, clear river originating from the upwellings and local drainages of the eastern portion of Dry Bay. The river produces good returns of sockeye, coho and chum salmon. East River salmon catches have averaged approximately 99,000 sockeye, 16,000 chum, and 9,000 coho salmon during the last five seasons. In recent years, the East River has been the most productive sockeye salmon fishery of all Yakutat area rivers.

The Doame River joins the East River approximately 4 miles upstream from the East River mouth. Coho salmon predominate in the Doame River and relatively few sockeye enter the drainage. A large lagoon is located at the junction of the two rivers, where sockeye, chum, and coho salmon ripen prior to moving upstream to spawn.

Commercial fishing occurs in two areas: 1) beginning one mile below Steve's Island to the mouth, a distance of 2 1/2 miles, and 2) in the ocean waters adjacent to the river mouth within 2 miles each direction of the mouth, out to 500 yards from the shore at low tide.

The opening date for the East River fishery was changed from the first to the fourth Monday in June by the Alaska Board of Fisheries. This action was taken to protect the small Doame River sockeye salmon stock which can not sustain a commercial harvest. The East River sockeye salmon stock begins to enter the river in late June.

The East River summer sockeye salmon season will open on June 26. The duration of weekly fishing periods and open areas will be based on East River escapement observations, effort levels, and fishery performance. As in recent years, up-river closures may be necessary during high water periods to minimize the harvest of the fish schooled in the lagoon that move down river during these periods. The sockeye salmon season is expected to continue until late August.

The East River surf fishing area can be expected to be open during the same periods as the in-river fishery. The surf fishing area is defined by regulation to be adjoining ocean waters within 500 yards of the shore at low tide and two miles east and west of the mouth of the East River.

Situk-Ahrnklin and Lost Rivers

The Situk-Ahrnklin lagoon is the site of the oldest and, historically, the most productive salmon fishery in the Yakutat area. Located approximately seven miles by road from Yakutat, it normally supports the largest concentration of fishing effort in Yakutat. Fishing occurs primarily in the lagoon, although some

fishing occurs at the river mouth and in the adjoining surf fishing area. During the summer sockeye comprise the major portion of the harvest. Coho dominate catches in the fall. Situk River catches have averaged approximately 30,000 sockeye, 42,000 coho, 10,000 pink, and 450 chinook salmon during the most recent five year period. The sockeye escapement goal for the Situk River drainage is 40,000 to 55,000 fish.

The Lost River is located a short distance from the Situk River. Fish from both rivers are harvested in the Lost River fishery. For this reason, the Lost River is usually included in the same weekly fishing periods as established for the Situk River fishery during the summer sockeye season. Occasionally, when extended fishing is allowed in the Situk River Lagoon, the Lost River is not opened for extended fishing due to the smaller size of Lost River sockeye returns. During the fall coho season, the Lost River is managed independent of the Situk River fishery.

The strength of the 1989 Situk River sockeye return is expected to be similar to the past two years; the catch during 1987 and 1988 ranged from 52,000 to 63,000 fish. The parent year (1984) sockeye spawning escapement was approximately 58,000 fish, which is slightly above the current escapement goal range of 40,000 to 55,000 fish.

The season opening date for the Situk and Lost Rivers will be, as specified by regulation, the 3rd Monday in June (June 19). The duration of the opening will be dependent on the sockeye run strength. Indications of run strength will include Situk River weir counts, lower river float counts, and subsistence fishing success. This information will be compared to historical information. If a poor sockeye run develops, conservation actions can be expected in all fisheries harvesting these returns.

As in recent years, a migration run timing model will be employed to estimate the total Situk River sockeye return. However, the model does not provide reliable run size estimates until early July.

An average return of chinook salmon is expected to the Situk River in 1989. Since chinook are taken incidentally in the set gill net fishery, the Situk commercial catch of chinook is largely dependent on the fishing time allowed for sockeye. If chinook runs are weak while sockeye runs are average or better, conservation actions may be necessary to reduce incidental take of chinook salmon.

In 1989, the Alaska Board of Fisheries adopted a regulation allowing the department to implement gillnetting periods during which chinook salmon may not be sold. This regulation was approved to allow gillnetting to continue for sockeye salmon when conservation of chinook salmon was needed. The non-sale provision will allow the retention of dead kings for personal use and prevent fish wastage. A non-sale restriction can be expected if chinook salmon run strength evaluation indicates the chinook salmon spawning escapement goal of 1,000 to 1,400 large spawners will not be obtained and surplus sockeye are available for harvest.

Gillnetters are encouraged to tend their nets closely during non-sale periods and release any chinook salmon captured as quickly as possible to reduce mortality. The department will monitor any non-sale periods to estimate incidental catches and mortality.

In late June Steelhead occasionally build up in the Situk River awaiting higher water levels to return to the ocean. When the out-migration occurs there is a potential to harvest a significant portion of the spawning population. If a major out-migration is expected during a scheduled open gill netting period, as indicated by a major rainstorm, the opening may be delayed for a day or two to reduce the potential for a high incidental catch of steelhead.

Yakutat Bay

There are four different gillnetting areas in Yakutat Bay: the Monti Bay fishery in the southern portion, the Manby Shore ocean fishery and the Manby Shore instream fishery along the northern shore, and the Humpy Creek fishery in the southeastern portion of the bay.

Both the Monti Bay and Manby Shore ocean sockeye fisheries harvest primarily mixed stocks of sockeye destined for spawning streams south of Yakutat Bay. In 1987, tag recovery data showed that approximately 50% of all sockeye caught in Monti Bay were bound for the Situk River. During some individual weeks, the Monti Bay catch were virtually all of Situk River origin. Therefore, management of the Monti Bay and Manby Shore ocean fisheries will continue to be based on the need to conserve or harvest sockeye returning to the Situk River.

Monti Bay

The Monti Bay fishery (the waters of Yakutat Bay south of 59°40' north latitude) will open on Monday, June 12. The initial opening period will be for a 2.5 day period from 6:00 a.m. Monday through 6:00 p.m. Wednesday. Additional sockeye fishing in Monti Bay will depend on Situk River sockeye salmon run strength assessment. This initial opening is similar to those of previous years.

Manby Shore Ocean

The scheduled regulatory opening date for Manby Shore ocean fishery (waters of Yakutat Bay north of 59°40' north latitude) is Monday June 19, the same opening date as the Situk River. The summer fishing periods will correspond to the Situk River fishing periods.

Manby Shore Instream

Management of the Manby Shore instream fisheries, waters upstream of the mean high tide line, will be based on the availability of local stocks. During the summer season, these fisheries harvest salmon primarily from Manby and Sudden Streams. A two and one-half day weekly fishing period can be expected during the initial open period scheduled for June 26. Subsequent fishing periods will be based only on fishery performance, since escapement monitoring is not possible.

Humpy Creek

The Humpy Creek fishery targets on local pink salmon. Very little pink salmon harvest is expected to return to Humpy Creek in 1989 because the 1987 spawning escapement of only 2,000 fish was poor. In-season management of this fishery will be based on observed pink salmon spawning escapement in Humpy Creek and the availability of pink salmon in the Yakutat Bay fishery. If adequate numbers of pink salmon return, the expected opening date for this fishery would be late July or early August.

Akwe River

The Akwe River, located approximately 35 miles south of Yakutat, is a partly glacial system. The lower seven miles of the river are very wide and shallow. Here, the river flows parallel to the beach before entering the ocean. It is in this lower portion of the river that commercial fishing takes place. The recent five year average Akwe River harvest is approximately 11,300 sockeye, 8,600 coho, and 200 chinook salmon.

The sockeye salmon parent year catch and escapement information for the Akwe indicates an average sockeye return for the 1989 season. Increased sockeye salmon production in the Akwe River has

resulted in additional fishing effort during the last six years. To obtain good escapements, with this additional fishing effort, reductions in the normal 2.5 day weekly fishing period, enlargement of the closed water area, and gear reductions have all been necessary. The Akwe River sockeye fishery is scheduled to open on June 26. The sockeye salmon season should extend through early August. Inseason management will, as in recent years, be based on fishery performance information.

The Akwe River will open upstream of the markers located approximately 1/2 mile above the junction with the Italo River to the upper markers located 2 1/2 miles downstream from the westernmost end of the sand dunes. This provides an open area of approximately 4 miles between the markers. Fishing opportunities in this area should be adequate to allow full utilization of the sockeye and coho stocks.

Italo River

The Italo River is adjacent to the Akwe River and supports small runs of sockeye and coho. The Italo River changed its course and flowed into the lower Akwe River during the winter of 1986-87 and both rivers now share a common mouth to the ocean. The recent five year Italo River harvest has averaged approximately 2,800 sockeye and 5,000 coho salmon. Historically, it has produced sockeye catches of over 20,000 fish.

Because both the Italo and Akwe Rivers' stocks enter through the common river mouth, these fish mix together for some distance upstream in each river. Determination of the specific run strength to either the Akwe River or Italo River from fishing success in the junction area will not be possible. To minimize these mixed stock problems, the common river mouth area and portion of each river above the junction will be closed to commercial fishing. The Italo River will be open when good indications of escapement are observed.

Seal River

The Seal River in the Yakataga District will be opened on June 19 to provide an experimental fishery to assess the sockeye run strength. This area was open in 1988 but was not fished. The season will begin with a two and one-half day weekly period. Subsequent fishing periods will depend on effort levels and fishing success.

1989 FALL SEASON MANAGEMENT PLAN

The fall fishing season is directed primarily at harvesting coho salmon, although the harvest of chum salmon is a major component of the management of the East River fishery. The fall season historically begins on the first Monday of August, a time when the regulatory weekly fishing periods, in most areas, changes from 6:00 a.m. Monday through 6:00 p.m. Wednesday to 12:01 p.m. Monday through 12:00 noon Thursday.

During the fall season, set gillnetting occurs in both the Yakutat and Yakataga Districts. In the Yakutat District, the fall coho salmon fishery occurs in generally the same areas as the summer season sockeye salmon fishery. While in the Yakataga District, the season is only open during the fall coho season in most major areas.

No statistical forecast of coho salmon returns is available. However, low water levels in 1987 are thought to have caused reduced freshwater survival and a below average coho salmon return is anticipated for the 1989 season.

Yakutat District

The fall coho salmon season will begin on August 7 in the Yakutat District, except for the East River where management will continue to be based on harvesting sockeye salmon through most of August.

Inseason management of all Yakutat District fall fisheries will be based primarily on fishery performance information compared to historical catch and effort information. Coho escapement information in season is very limited. The initial fishing periods can be expected to extend from 12:00 p.m. Monday through 12:00 noon Thursday. Fishing time and area adjustments will be implemented on a river by river basis as needed for conservation.

A closed water area can be expected to be established on the Yahtse River, as in recent years, to protect schools of milling coho salmon at tributary mouths. The actual closed water area will be based on inseason observations of coho salmon schooling behavior which is related to river flow conditions.

Yakataga District

The major fall fishing in the Yakataga District occurs for coho salmon on the Kaliakh and Tsiu Rivers, which are located approximately 125 miles northwest of Yakutat. The Tsiu River is the most productive of the two rivers with an average harvest in recent years of about 45,000 coho. The Kaliakh harvest has averaged about 14,000 coho in recent years. Parent year (1985) catch and escapement indicate that the 1989 coho salmon harvest should be average or better.

The Tsiu River fishery is expected to be initially open on August 21. The Tsiu River fishing periods will be determined by the escapement observed in the Tsiu-Tsivat Lagoon and the numbers of fish moving into the river between fishing periods. The Tsiu River has broken out into the ocean in a new channel which is much shorter in length from the lagoon than the old channel. This small area may require a change in distance between gear or other management options yet to be determined.

The initial Kaliakh River weekly fishing period will be from 9 a.m. Monday through 9 a.m. Thursday. The duration of subsequent fishing periods will be based fishery performance since inseason assessment of spawning escapement is not possible due to river turbidity.

Several small coho streams are located along the forelands west of the Yahtse River to Cape Yakataga that cannot support instream set gill net fisheries. As in recent years, these streams will not open for commercial set gill net fishing. The area to be closed is all waters of the Yakutat Area between regulatory markers to be placed at a point one-half mile west of the Yahtse River and at Cape Yakataga.